UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,946	04/30/2001	Patrick L. Coleman	56548USA8A.002	3318

32692 7590 12/22/2003

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER	
TARAZANO, DONALD LAWRENCE	

ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 12/22/2003

Office Action Summary	Application No. 09/845,946	Applicant(s) COLEMAN ET AL.	
	Examiner D. Lawrence Tarazano	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *9-22-2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) *10-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-9,23,24 and 26-38* is/are rejected.

7)☒ Claim(s) *25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-9 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Bourdelais et al. (6,329,113).

2. Bourdelais et al. teach a sheet comprising a heat shrinkable layer, a strength layer, and an image-receiving layer.

   a. The heat shrinkable layer shrinks to a small degree during the processing of the structure (column 8).

   b. The strength layer, which is coated on the heat shrinkable, comprises (vinylbenzyl) trimethylammonium chloride (column 16, lines 21+).

c. Over top of the strength layer is a hydroxy cellulose layer (column 16, lines 29+), in which hydroxy cellulose is a polysaccharide.

3. Regarding the thickness of the layers, based on the coating weights (column 16), and the thickness of the DRL cited on (column 15, lines 6+), it would appear that the layer would have the claimed thickness.

4. Regarding the claimed "mask layer", additional layers may be present in the structure and one of them would correspond to the claimed "mask" layer.

5. Regarding the claimed topography, the films are shrunk to some degree so they would have (x, y, z) surface area (topographical) bigger than (x, y) surface area (projected) as claimed.

6. Claims 1-9, 23-24, 26-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Fehervari et al (6,403,278) with additional evidence provided by Kim et al. (5,593,809) which is incorporated by reference.

7. Kim et al. teach a multilayer structure used in the photographic arts, in which the image-receiving layer comprises a cross-linked polymer. A material such as ethylene vinyl alcohol copolymer or polyvinyl alcohol, which has been cross-linked, by a material such as borate is a hydrogel as claimed (5,593,809, column 9).

8. The strip coat material (6,403,278) contains ammonium functionalized acrylic monomers as claimed (column 6).

9. Regarding the attachment of proteins or polysaccharides to the surface layer. It is believed that the processing composition (34) contains gelatin, but there are so many gelatin

materials and cellulose materials used in the formation of the structure some would come in contact with the strip coat material and become attached.

10. Regarding the claimed surface topography. The examiner takes the position that any surface would meet the claimed limitation. The projections are merely the (x, y) surface area. Since all surfaces have some degree of variation, a measurement including the (z) component for any (x, y, z) (topographical surface area) measurement would necessarily be greater than the (x, y) surface area. The applicants' preamble is merely a statement of fact, not a patentable distinction.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bourdelais et al. (6,329,113).

Bourdelais et al. teach coatings comprising 4-vinyl benzyltrimethtyl ammonium chloride but they do not teach the ammonium salts claimed. This material is an unsaturated monomer having an ammonium group there on. The applicants have removed this materials from the Markush group, but the Markush group contains other materials, which are homologues (i.e., monomers having ethylennic unsaturation and an ammonium group). The examiner takes the position that these materials would function in the same manner as the vinyl benzyltrimethtyl ammonium chloride and that it would have been obvious to one having ordinary skill in the art

to have used homologues in place of the vinyl benzyltrimethtyl ammonium chloride used. The ammonium salts claimed are commercially available and there is nothing on the record to show that one functions differently from the next.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 32-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent Application Number 09/860,944. Although the conflicting claims are not identical, they are not patentably distinct from each other because: As discussed above, the preamble describing the topography is a statement of fact, it does not provide patentable distinction over any film. (US 20030049435A1). This is a provisional rejection.

Claim Rejections - 35 USC § 112

15. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 37 and 38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not clear what the ratios have support in the specification as originally filed. The examiner asks if the applicants can show where these claims are supported..

Response to Arguments

16. Applicant's arguments with respect to claims 1-9, 23-34 have been considered but are not persuasive. The applicants have amended the claim to be a relaxed oriented film or an relaxed elastic film. The applicants asked for reconsideration regarding the election requirement. Since no generic claims are deemed to be allowable by the examiner, there is no reason to rejoin the claims.

17. The applicants argue that the films taught by Bourdelais et al do not have the topographical features claimed. The examiner disagrees, the prior art materials are shrinkable films that have been coated then allowed to relax. The applicants state that the "topographical area" is larger than the "projected area", and argue that this is a patentable distinction. As stated before the examiner believes that this is true for all films even those with very small levels of projections. It appears that the topographical area (the entire surface area X, Y and Z axis)

(applicants' page 5), would be bigger than the projected area (the surface area calculated from X and Y). An area that further includes the (Z) vector, (i.e. X, Y and Z) would always be bigger than area just calculated on (X and Y). Even small changes to the surface due to processing conditions would make Z be greater than 0 and thus the topographical area would be larger than the projected area.

18. Regarding the arguments that Kim et al. (5,593,809) / Fehervari et al. (6,403,278), the instant claims are directed to a "relaxed oriented film", a relaxed film would not be physically different from just a regular film.

19. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to teach azlactone functional hydrogel layers in combination with the claimed ionic layers.

20. Regarding claims 37 and 38, the applicants have presented new dependent claims, which recite a ratio of the topographical area to the projected area. It appears that a value of greater than 5 would require a high level of shrinkage and this is not suggested by the prior art.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Lawrence Tarazano whose telephone number is (703)-308-2379. The examiner can normally be reached on 8:30 to 6:00 (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on (703)-309-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9310 for regular communications and (703)-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.

D. Lawrence Tarazano
Primary Examiner
Art Unit 1773

dlt
December 10, 2003